WHAT IS CLAIMED:

1. An apparatus, comprising:

a processor core;

a thermal sensor proximate to the processor core;

an electrical power sensor proximate to the processor core; and

a power management unit to control the processor core based on a thermal power threshold and an electrical power threshold that is different from the thermal power threshold.

2. The apparatus of claim 1, wherein the electrical power threshold is higher than the thermal power threshold.

3. The apparatus of claim 1, wherein the thermal power threshold is higher than the electrical power threshold.

4. The apparatus of claim 1, wherein the power management unit is arranged to throttle the processor core if the thermal power threshold or the electrical power threshold is exceeded.

5. The apparatus of claim 1, wherein the power management unit is arranged to increase a voltage or a frequency of the processor core if data from the electrical power sensor does not exceed a low power threshold.

6. The apparatus of claim 1 further comprising:

another processor core,

wherein the power management unit is arranged to control operation of either one of the processor core and the another processor core based on a thermal power threshold and an electrical power threshold that is different from the thermal power threshold.

7. The apparatus of claim 6, wherein the power management unit is arranged to control operation of both the processor core and the another processor core at the same time.

8. The apparatus of claim 1, wherein the power management unit is arranged to receive thermal data from an external thermal sensor that is external to the apparatus, and

wherein the power management unit is further arranged to control the processor core based on data from the thermal sensor, data from the electrical power sensor, and the thermal data from the external thermal sensor.

9. A system, comprising:

a first portion, including:

a first thermal sensor to provide first thermal data;

a processor, including:

a core,

a core thermal sensor to provide core thermal data,

an electrical power sensor to provide electrical data, and

a power management unit to selectively throttle the core based on the first thermal data, the core thermal data, and the electrical data.

10. The system of claim 9, wherein the power management unit is arranged to throttle the core if the first thermal data exceeds a first thermal threshold.

11. The system of claim 10, wherein the power management unit is arranged to throttle the core if the core thermal data exceeds a second thermal threshold.

12. The system of claim 10, wherein the power management unit is arranged to throttle the core if the electrical data exceeds an electrical power threshold.

13. The system of claim 9, wherein the power management unit is arranged to increase performance of the core if the electrical data falls below a low electrical power threshold.

14. The system of claim 13, wherein the power management unit is arranged to increase the performance of the core by increasing one or more of a voltage of the core or a frequency of the core.

15. The system of claim 9, further comprising:

a device to generate directional airflow across the first portion and the processor, wherein the first portion is located downstream in the airflow from the processor.

16. The system of claim 9, further comprising:

a second portion, including:

a second thermal sensor to provide second thermal data,

wherein the power management unit is arranged to selectively throttle the core based on the first thermal data, the second thermal data, the core thermal data, and the electrical data.

17. A method, comprising:

checking first thermal data from a first component;

reading second thermal data from a second component;

examining electrical data from the second component; and

selectively reducing power consumption of the second component based on the first thermal data, the second thermal data, and the electrical data.

18. The method of claim 17, further comprising:

delaying for a time after reducing the power consumption of the second component.

19. The method of claim 18, further comprising:

repeating the checking, the reading, the examining, and the selectively reducing after the delaying for a time.

20. The method of claim 17, wherein the reading second thermal data and the examining electrical data are performed if the first thermal data does not exceed a threshold.

21. The method of claim 17, further comprising:

selectively increasing power consumption of the second component based on the electrical data.

22. The method of claim 21, wherein the selectively increasing power consumption includes increasing a voltage to the second component, increasing a frequency of the second component, or enabling a portion of the second component.

23. A method, comprising:

checking first thermal data from a first portion;

reading second thermal data from a processor;

examining electrical data from the processor;

decreasing power consumption of the processor if the first thermal data exceeds a first threshold, if the second thermal data exceeds a second threshold, or if the electrical data exceeds third threshold; and

increasing power consumption of the processor if the electrical data is lower than a fourth threshold.

24. The method of claim 23, further comprising:

delaying for a time after decreasing power consumption of the processor.

25. The method of claim 23, further comprising:

leaving the power consumption of the processor unaltered if the electrical data is between the third and fourth thresholds.